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(54) FINE ZINC OXIDE PARTICLES, PROCESS FOR PRODUCING THE SAME, AND USE THEREOF

(57) A process for producing zinc oxide fine particles comprising heating a mixture comprising a zinc source, a carboxyl-containing compound, and an alcohol; a process for producing zinc oxide-polymer composite particles, which comprises heating a mixture comprising a zinc source, a carboxyl-containing compound, a polymer, and an alcohol at a temperature of 100°C or higher; a process for producing inorganic compound particles having on their surface a cluster of thin plate like zinc oxide crystals with their tip projecting outward, which comprises heating a mixture comprising a zinc source, a carboxyl-containing compound, lactic acid or a compound thereof, and an alcohol at a temperature of 100°C or higher; a process for producing zinc oxide-based particles comprising heating a mixture comprising a zinc source, a carboxyl-containing compound, at least one element additive selected from the group consisting of the group IIIB metal elements and the group IVB metal elements, and an alcohol at a temperature of 100°C or higher; zinc oxide-based fine particles obtained by these processes; and uses of the zinc oxide-based fine particles.

Fig. 1



1 μm

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